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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,389	01/06/2004	Andreas Balle	BALLE ET AL I	3567
25889	7590	01/26/2006	EXAMINER	
WILLIAM COLLARD COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			TRAN, DIEM T	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/752,389	Applicant(s) BALLE ET AL.	
	Examiner Diem Tran	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-19 is/are rejected.
- 7) ☐ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: the following headings of the specification are missing, such as:

- *Background of the Invention.*
- *Summary of the Invention.*
- *Brief description of the drawing(s).*
- *Description of the preferred embodiments.*

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 8, 11-15, 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Noritake (US Patent 4,353,873).

Regarding claims 1, 19, Noritake discloses an exhaust gas treatment device, in particular for an internal combustion engine, preferably in a motor vehicle, comprising a housing (2) and a substrate body (1) which is situated in the housing (2) and through which exhaust gases can flow in an axial direction, whereby the substrate body (1) is supported axially by an axial bearing on the housing (2) on at least one axial end face (1a) (see Figures 8, 11), whereby the axial bearing

has a supporting ring, which is fixedly mounted on the housing and has a U-shaped profile (4), which is open axially toward the end face of the substrate body (1), whereby the axial bearing has a bearing ring (5) of a bearing material which engages in the U-shaped profile (4) of the supporting ring on its axial end facing away from the substrate body (1) and is supported axially thereon and which is supported on the end face (1a) of the substrate body (1) with its axial end facing the substrate body (see Figures 1, 2).

Regarding claim 2, Noritake further discloses that the bearing ring is designed as a knit cushion (see col. 2, lines 8-10, 42-45).

Regarding claim 3, Noritake further discloses that the bearing ring (5) supports the substrate body (1) axially on an edge section (18) which is on the outside radially of the axial end face (1a).

Regarding claim 4, Noritake further discloses that an outside cross section of the bearing ring (5) is greater than an outside cross section of the substrate body (1) on its end face (1a), an inside cross section of the bearing ring (5) is smaller than the outside cross section of the substrate body (1) on its end face (1a) (see Figures 1, 4).

Regarding claim 5, Noritake further discloses that an outside leg on the outside radially of the U-shaped profile (4) of the supporting ring has on its inside radially an inside cross section which is greater than an outside cross section of the substrate body (1) on its end face (1a) (see Figure 4).

Regarding claim 7, Noritake further discloses that an inside leg (4b), which is on the inside radially of the U-shaped profile (4) of the supporting ring, is shorter axially than an

outside leg (4a) which is on the outside radially of the U-shaped profile of the supporting ring (10) (see Figure 4).

Regarding claim 8, Noritake further discloses that the supporting ring is designed as a separate component, which is fastened to the housing (2) (see Figures 2, 4).

Regarding claim 11, Noritake further discloses that the substrate body is supported radially on the housing (2) by a radial bearing along its circumference, the radial bearing has a bearing mat (3) made of bearing material surrounding the substrate body (1) on the outside radially, the bearing ring (5) and the bearing mat (3) are separate components (see Figure 11).

Regarding claim 12, Noritake further discloses that the bearing ring and bearing mat (3) are spaced a distance apart from one another axially (see Figures 2, 11).

Regarding claim 13, Noritake further discloses that the substrate body (1) is supported axially on the housing (2) via the axial bearing at least on its axial end face on the outflow side (see Figures 2, 8, 11).

Regarding claim 14, Noritake further discloses that the bearing ring (5) has a profile whose extent in the axial direction is greater than or approximately twice as large as its extent in the radial direction (see Figure 4).

Regarding claim 15, Noritake further discloses that the dimensions of the supporting ring and the bearing ring (5) are coordinated so that two legs (4a, 4b) of the U-shaped profile (4) of the supporting ring support the bearing ring on the outside radially and on the inside radially (see Figure 4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noritake et al. (US Patent 4,353,873) in view of Isogai et al. (US Patent 4,448,754).

Regarding claims 6, 9, Noritake discloses all the claimed limitations as discussed in claim 1 above, however, fails to disclose that the supporting ring is at a distance axially from the end face of the substrate body facing it and has an interruption in the circumferential direction. Isogai teaches that it is conventional in the art, to utilize a supporting ring (18) is at a distance axially from the end face of the substrate body facing it (see Figure 1) and has an interruption in the circumferential direction (see Figures 1, 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the teaching of Isogai in the Noritake device since the use thereof would have been conventional in the art to allow the support ring to expand or contract due to a temperature change.

Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noritake et al. (US Patent 4,353,873) in view of Shibata et al. (US patent 6,635,227).

Regarding claims 16-18, Noritake discloses all the claimed limitations as discussed in claim 1 above, however, fails to disclose that the bearing ring is designed as a spring having a predetermined characteristic and the bearing ring is installed with an axial prestress. Shibata teaches that it is conventional in the art, to utilize a bearing ring being designed as a spring having a predetermined characteristic and being installed with an axial prestress (see col. 5, lines 35-42).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the teaching of Shibata in the Noritake device since the use thereof would have been conventional in the art.

Allowable Subject Matter

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (571) 272-4866. The examiner can normally be reached on Monday -Friday from 8:00 a.m.- 6:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (571) 272-4859. The fax number for this group is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 800-786-9199 (toll-free).

DT
January 20, 2006



Diem Tran
Patent Examiner
Art unit 3748



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